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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/632,466	08/04/2000	Henry Milan	1-14402	1939
4859	7590	03/22/2005	EXAMINER	
MACMILLAN SOBANSKI & TODD, LLC ONE MARITIME PLAZA FOURTH FLOOR 720 WATER STREET TOLEDO, OH 43604-1619			HUYNH, KIM T	
			ART UNIT	PAPER NUMBER
			2112	

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/632,466	Applicant(s) MILAN ET AL.	
	Examiner Kim T. Huynh	Art Unit 2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt Acknowledgement

1. Receipt is acknowledged of the request filed on 28th of February 2005 for a request for continued examination (RCE) under 37 CFR 1.114 based on the application No. 09/461,643, which the request is acceptable and an RCE has been established. Claims 24-34 have been canceled and claims 35-43 are newly added. Currently, claims 35-43 are pending in this application.

Claim Objections

2. Claims 41s are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim 41s. See MPEP § 608.01(n). Accordingly, the claim 41s not been further treated on the merits. Renumbering the claims is necessary.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 35-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizutani et al. (Pub No. :US 2003/0043771 A1) in view of Mattingly et al. (Pub No US20010014102)

As per claim 35, Mizutani discloses a wireless Universal Serial Bus (USB) hub and remote wireless peripheral device for communication with a computer having a USB port comprising:

- A remote wireless peripheral device (fig.1, 7) having a circuit for generating device information related to operations performed by said peripheral device and an RF transmitter (fig.1, 21) connected to said circuit for transmitting a wireless signal including said device information, said circuit and said RF transmitter being integral to said peripheral device, said RF transmitter being the sole means for communicating said device information from said peripheral device and [0014-0015], [0077], wherein transceiver 21 of wireless transmitting wireless signal into transceiver 23 of device for receiving wireless signal)
- A data reception circuit for receiving said wireless signal from said RF transmitter; (fig.1, 23)
- An upstream USB port adapted to be connected to the computer; and [0116], wherein upstream to computer and downstream to devices)
- A hub controller connected between said data reception circuit and said upstream USB port whereby when said upstream USB port is connected to the USB port of the computer and said peripheral device generates said wireless signal to said data reception circuit, said hub controller converts said wireless signal to a USB data signal and passes said USB data signal to said upstream port for communication to the computer. [0116], [0077]

Mizutani discloses all the limitations as above except peripheral device not having any USB communication capability, said peripheral device being one of a keyboard, a mouse and a joystick. However, Mattingly discloses hub 102 is providing wireless communications to a plurality of users, through devices 104a-n. [0023] Devices 104a-n can include any integral device that is configured for accessing a computer system wirelessly and does not include USB capability, ([0026] ie, any devices such as portable computers having keyboard.)

It would have been obvious to one having ordinary skills in the art at the time the invention was made to incorporate Mattingly's teaching into Mizutani's system so as implement wireless peripherals without use of USB capability since Mattingly shows such devices to be equivalent and Mizutani suggests that any device may be used,[0011] so it is more flexibility not only for computer peripherals but others like telephones, pagers, or PDA as well.

As per claim 36, Mizutani discloses an RF transmitter(fig.1, 21 ie wireless transceiver) connected to said circuit for transmitting a wireless signal including said device information(fig.1,7, ie device), said circuit and said RF transmitter being integral to said devices. [0047]

Mizutani discloses all the limitations as above except wherein said peripheral device is a keyboard and including a mouse having a circuit for generating device information causing associated operations to be

performed by the computer and said RF transmitter being the sole means for communicating said device information from said and said mouse not having any USB communication capability, and said hub having means to distinguish between said keyboard wireless signal and said mouse wireless signal. However, Mattingly discloses hub 102 is providing wireless communications to a plurality of users, through devices 104a-n. [0023] Devices 104a-n can include any integral device that is configured for accessing a computer system wirelessly and does not include USB capability, ([0026] ie, any devices such as portable computers having a keyboard)

It would have been obvious to one having ordinary skills in the art at the time the invention was made to incorporate Mattingly's teaching into Mizutani's system so as implement wireless peripherals without use of USB capability since Mattingly shows such devices to be equivalent and Mizutani suggests that any device may be used,[0011] so it is more flexibility not only for computer peripherals but others like telephones, pagers, or PDA as well.

As per claim 37, Mizutani discloses a wireless Universal Serial Bus (USB) hub and remote wireless peripheral device for communication with a computer having a USB port comprising:

- A remote wireless peripheral device (fig.1, 7) having a circuit for generating device information related to operations performed by said

peripheral device and an RF transmitter (fig.1, 21) connected to said circuit for transmitting a wireless signal including said device information, said circuit and said RF transmitter being integral to said peripheral device, said RF transmitter being the sole means for communicating said device information from said peripheral device and [0014-0015], [0077], wherein transceiver 21 of wireless transmitting wireless signal into transceiver 23 of device for receiving wireless signal)

- A hub controller connected between said data reception circuit and said upstream USB port whereby when said upstream USB port is connected to the USB port of the computer and said peripheral device generates said wireless signal to said data reception circuit, said hub controller converts said wireless signal to a USB data signal and passes said USB data signal to said upstream port for communication to the computer. [0116], [0077]

Mizutani discloses all the limitations as above except peripheral device not having any USB communication capability. However, Mattingly discloses hub 102 is providing wireless communications to a plurality of users, through devices 104a-n. [0023] Devices 104a-n can include any integral device that is configured for accessing a computer system wirelessly and does not include USB capability, ([0026] ie, any devices such as portable computers having a keyboard.)

It would have been obvious to one having ordinary skills in the art at the time the invention was made to incorporate Mattingly's teaching into

Mizutani's system so as implement wireless peripherals without use of USB capability since Mattingly shows such devices to be equivalent and Mizutani suggests that any device may be used,[0011] so it is more flexibility not only for computer peripherals but others like telephones, pagers, or PDA as well.

As per claim 38, Mizutani discloses wherein said data reception circuit further includes an RF receiver (fig.1, 21), for receiving said wireless signal from said peripheral device.

As per claim 39, Mizutani discloses wherein said data reception circuit further includes a signal discriminator connected between said RF receiver and said hub controller for receiving said wireless signal from said RF receiver and presenting said device information in said wireless signal to said hub controller. ([0047], [0020],[0014], wherein a hub and port each have a device identifier uniquely assigned)

As per claim 40, Mizutani discloses wherein said hub controller further includes a serial interface engine connected to said signal discriminator for converting said device information into USB format to form said USB data signal. [0014], ([0047], [0020],[0014], wherein a hub and port each have a device identifier uniquely assigned)

As per claim 41, Mizutani discloses the wireless system further including at least two (fig.8, 67, 69 ie wireless port) additional remote wireless peripheral devices and at least two additional data reception circuits each of said data reception

circuits corresponding to an associated one of said peripheral devices, wherein each of said data reception circuits includes an RF receiver for receiving a unique wireless signal from said associated one of said peripheral devices.

[0122], ie fig.1, 21 wireless transceiver for transmitting signals to wireless port 67 and another transceiver for wireless port 69), [0077], [0116])

As per claim 42, Mizutani discloses the wireless USB hub(fig.1, 3) and peripheral device (fig.1, 7) including at least one conventional downstream USB port in the hub (see abstract) and connected to said hub controller for connection to a USB peripheral device. [0116], wherein wireless hub controlling communication of port 5 of device (downstream) and upstream to computer via wireless, a hub and port each have a device identifier uniquely assigned [0020]

As per claim 43, Mizutani discloses a wireless Universal Serial Bus (USB) hub and remote wireless peripheral device for communication with a computer having a USB port comprising:

- At least two remote wireless peripheral devices (fig.8, 67, 69 ie wireless ports) having a circuit for generating device information related to operations performed by said peripheral device and an RF transmitter (fig.1, 21) connected to said circuit for transmitting a wireless signal including said device information, said circuits and said RF transmitters being integral to said peripheral devices, ([0122] said RF transmitter being the sole means for communicating said device information from said

peripheral device and [0014-0015], [0077], wherein transceiver 21 of wireless transmitting wireless signals to multiple ports)

- A data reception circuit for receiving said wireless signal from said RF transmitters; [0122]
- An upstream USB port(fig.1, 11) adapted to be connected to the computer; and [0116], wherein upstream to computer and downstream to devices)
- A hub controller connected between said data reception circuit and said upstream USB port whereby when said upstream USB port is connected to the USB port of the computer and said peripheral device generates said wireless signal to said data reception circuit, said hub controller converts said wireless signal to a USB data signal and passes said USB data signal to said upstream port for communication to the computer. [0116], [0077]

Mizutani discloses all the limitations as above except peripheral device not having any USB communication capability, said at least two peripheral devices including a keyboard and a mouse. However, Mattingly discloses hub 102 is providing wireless communications to a plurality of users, through devices 104a-n. [0023] Devices 104a-n can include any integral device that is configured for accessing a computer system wirelessly and does not include USB capability, ([0026] ie, any devices such as portable computers having a keyboard.)

It would have been obvious to one having ordinary skills in the art at the time the invention was made to incorporate Mattingly's teaching into Mizutani's system so as implement wireless peripherals without use of USB capability since Mattingly shows such devices to be equivalent and Mizutani suggests that any device may be used,[0011] so it is more flexibility not only for computer peripherals but others like telephones, pagers, or PDA as well.

5. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mizutani et al. (Pub No. :US 2003/0043771 A1) in view of Mattingly et al. (Pub No US20010014102) and further in view of Applicant Admitted Prior Art(AAPA)

As per claim 41, Mizutani discloses all the limitations as above except RF receiver is a DSSS BPSK modulation receiver as claimed in claims 18 and 23 and further recited as to claim 19, a signal discriminator connected between said DSSS BPSK modulation receiver and hub controller for receiving the wireless data signal. However, Applicant Admitted Prior Art RF receiver is conventional DSSS BPSK modulation receiver which is well known in the art. (page 10, lines 9-10)

Response to Amendment

6. Applicant's amendment filed on 2/28/05 have been fully considered but does not place the application in condition for allowance.

a. In response to applicant's argument that Mizutani's reference has only USB communication capability and the wireless port has both USB and wireless communication capabilities. And Mattingly concerns a computer telephony system that supports a plurality of user access devices. The devices 104a-n are not computer peripherals, but include personal communication devices such as wireless telephones, pagers, portable computers and PDA's. Thus, the Mattingly devices 104a-n are not the equivalent of and can not be substituted for the Mizutani USB device(7) and wireless port(5) combination. Examiner respectfully disagrees. Mattingly teaches a wireless hub 102 is providing wireless communications via devices 104a-n. Devices 104a-n can be any devices such as pagers, PDA, wireless phones and also any devices can included computer peripherals. These devices does not have USB capability. It would have been obvious to one having ordinary skills in the art at the time the invention was made to incorporate by replacing Mizutani USB device 7 and wireless port 5 with any devices 104a-n that is configured for accessing a computer system wirelessly because Mattingly providing flexibility for wireless connection for both non-USB or USB devices, e.g wireless telephones, pagers. Thus, it is properly combinable for the purpose stated in the rejection of record.

b. In response to applicant's argument that there is no combination of Mizutani and Mattingly that results in the claimed hub and one or more peripheral devices that communicate solely by RF transmission and wherein the hub can be connected to the USB port of a computer. Examiner respectfully disagrees. As Mizutani notes at fig.8, there are multiple wireless ports (implies multiple devices) configured accessing

computer system wirelessly via Wireless hub which included wireless transceiver 21 communicates to multiples devices. Wireless transceiver 21 is equivalent to applicant claimed peripheral devices communicate solely by RF transmission. Thus, the prior art teaches the invention as claimed and the amended claims do not distinguish over the prior art as applied.

Conclusion

7. *Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (571)272-3635 or via e-mail addressed to [kim.huynh3@uspto.gov]. The examiner can normally be reached on M-F 9.00AM- 6:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached at (571)272-3632 or via e-mail addressed to [mark.Rinehart@uspto.gov].*

The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9306 for regular communications and After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-2100.

Kim Huynh

March 17, 2005



TIM VO
PRIMARY EXAMINER